

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : ☐									

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Misidentified ☐	Past Due ☐																																																														

Work Order ID 161003

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161003

Page 3

Item ID: D4000-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Fuel Supply Fitting
Start Date: 5/16/2017 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 5/26/2017 Req'd Qty: 2.00 ***2*** Customer:
Reference: (P.A.)SCHEDULED/S

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
112 *112* QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.02		B.O 17-05-31		2	Ø		DAS 08 9-89
120 *120* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.04				2	Ø		DAS 44 9-89 17-05-31
124 *124* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.18				(x2)	Ø		20170601 BER.

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : ☐									

Work Order ID 161003

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161003

Page 4

Item ID: D4000-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Fuel Supply Fitting
Start Date: 5/16/2017 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 5/26/2017 Req'd Qty: 2.00 ***2*** Customer:
Reference: (P.A.)SCHEDULED/S

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
126 *126* QC Quality Control	QC7-Inspect Chemical Conversion Coat Memo	0.00 0.02				<u>2</u>			
128 *128* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo <i>NIA</i>	0.00 0.04							
130 *130* Packaging Packaging	Identify as per dwg & Stock Location: _____ Memo LOCATION : GA	0.00 0.02				<u>2</u>			

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : ☐									

Work Order ID 161003

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161003

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Item ID: D4000-1 Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Fuel Supply Fitting
Start Date: 5/16/2017 Start Qty: 2.00 *2* Cust Item ID:
Required Date: 5/26/2017 Req'd Qty: 2.00 *2* Customer:
Reference: (P.A.)SCHEDULED/S

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.20							
Quality Control									

DAS
21
9-89

JUN 02 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Picklist Print

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Page 1

Work Order ID: 161003

161003

Parent Item: D4000-1

D4000-1

Parent Item Name: Fuel Supply Fitting

Start Date: 5/16/2017

Required Date: 5/26/2017

Start Qty: 2.00

Required Qty: 2.00

Comments: Ipp Rev:A New Issue 10-01-28 JLM Verified By:EC IPP rev B
10.05.13 ecn10-562 EC verified by:DD IPP REV. C Change mat'l
size JFS 15/01/21 Verified by: JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M6061T6R3.000		Purchased	No			100	f	9.9700	0.063	0.132632			
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M6061T6R3 000

**

✓ 17-5-21

6061-T6 RD BAR 3.000"

Location	Loc Qty	Loc Code
MAT012	9.97	
m133699	0.4	
m135689	9.57	

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Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :	
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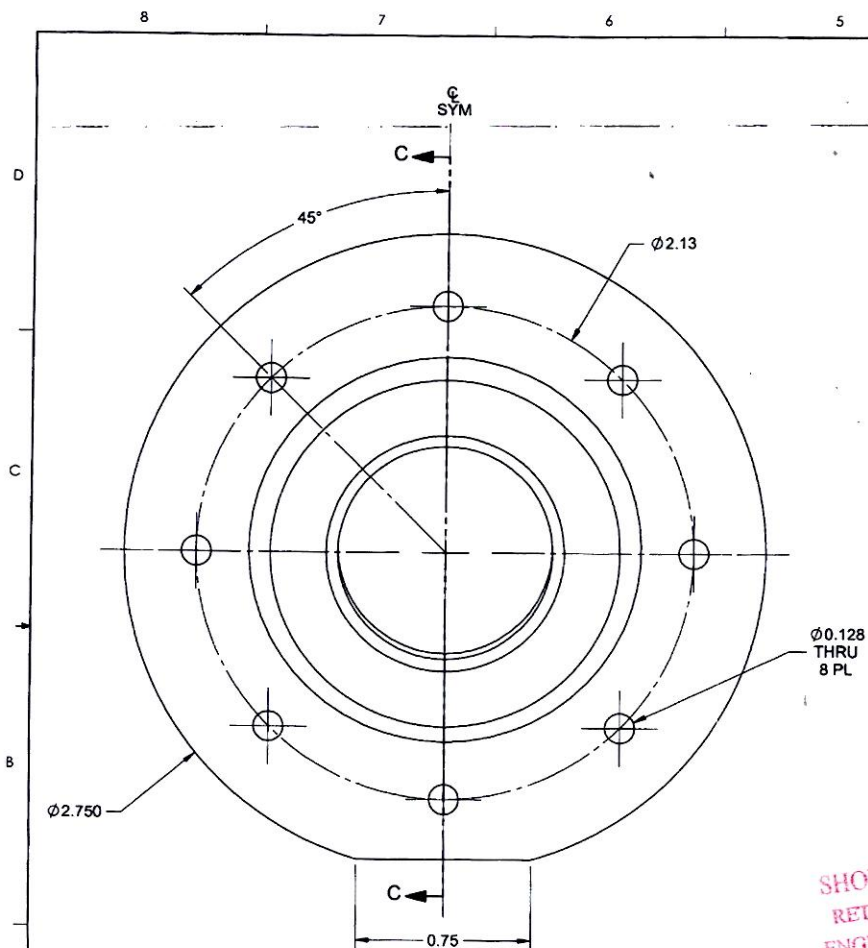


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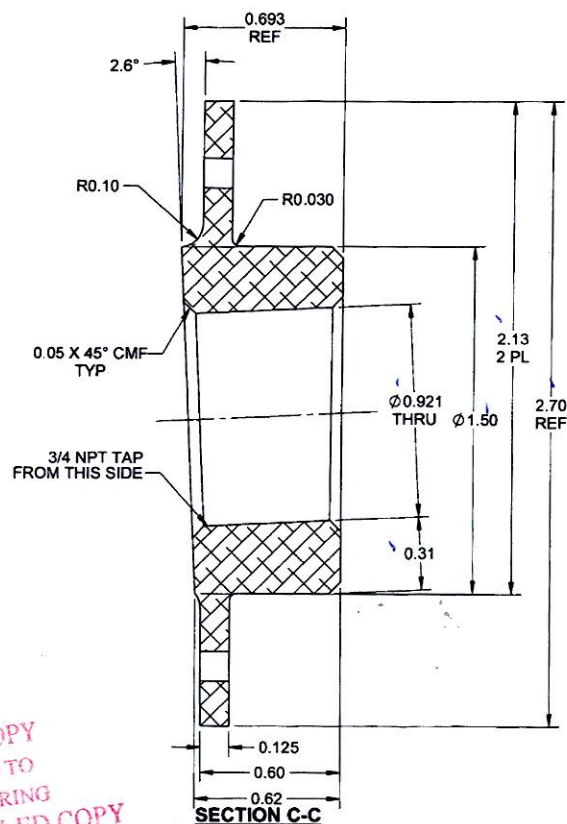


D4000-1 FUEL SUPPLY FITTING

NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) ROUND BAR
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR
PER AMS-QQ-A-200/8 (OR AMS 4160)
REF DART SPEC M6061T6R
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 METHOD 6.7
- 7) WEIGHT: 0.12 lbs

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *19103*
2017/05/17



RELEASED

2015 JAN 15 *47*

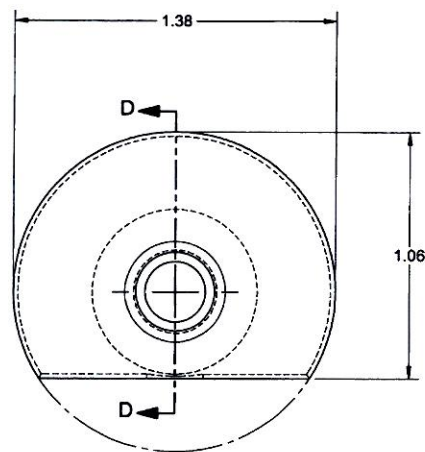
APPROVED

DESIGN	HS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	AJS	DRAWING NO.	REV. D
MFG. APPR.	JLM	D4000	SHEET 3 OF 8
APPROVED	MP	TITLE	SCALE
DE APPR.	DS	FITTING	NTS
DATE	14.11.14		

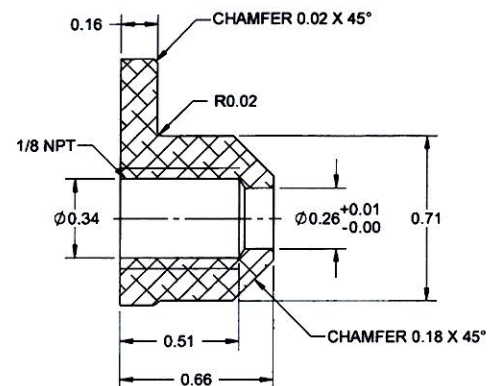
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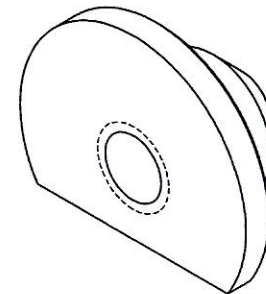
DART AEROSPACE PART NUMBER	JOHN CAMERON AVIATION PART NUMBER
D4000-3	JCA-M47-1-05



D4000-3 FUEL SUMP DRAIN FITTING



SECTION D-D



RELEASED

2015 JAN 15 *qp*

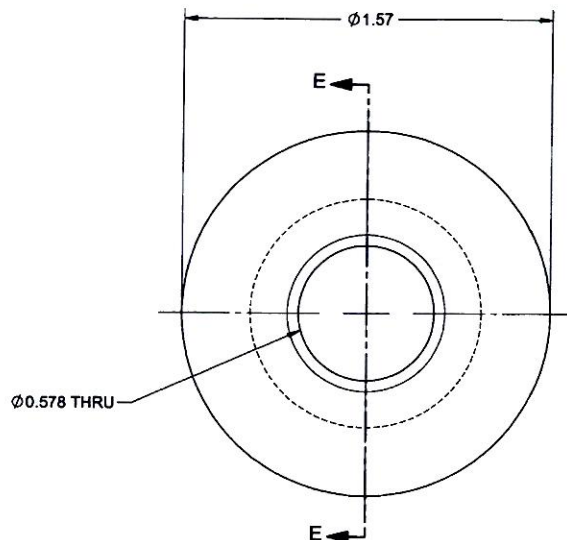
NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) ROUND BAR
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR
PER AMS-QQ-A-200/8 (OR AMS4160)
REF DART SPEC M6061T6R
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.03 lbs

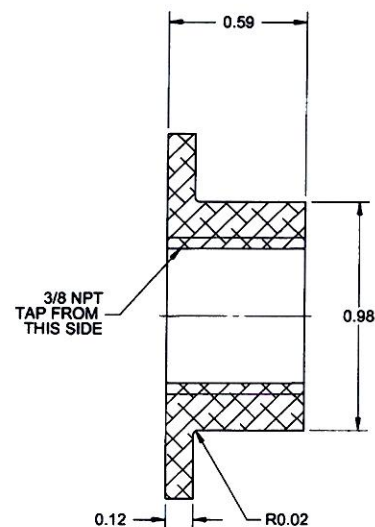
APPROVED

DESIGN	HS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	AJS	DRAWING NO.	REV. D
MFG. APPR.	JLM	D4000	SHEET 4 OF 8
APPROVED	MP	TITLE	SCALE
DE APPR.	DS- <i>#</i>	FITTING	NTS
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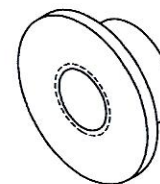
DART AEROSPACE PART NUMBER	JOHN CAMERON AVIATION PART NUMBER
D4000-5	JCA-M47-1-09



D4000-5 FUEL TANK VENT FITTING



SECTION E-E



RELEASED

2015 JAN 15 *qp*

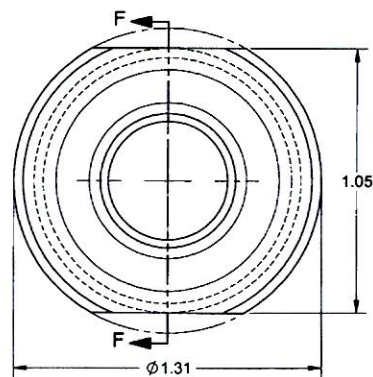
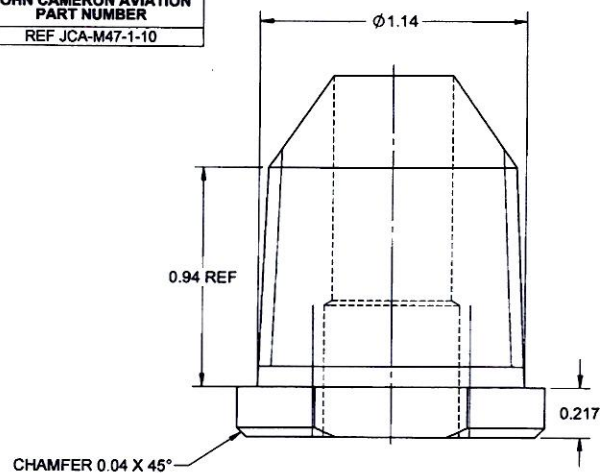
NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) ROUND BAR
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR
PER AMS-QQ-A-200/8 (OR AMS 4160)
REF DART SPEC M6061T6R
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 METHOD 6.7
- 7) WEIGHT: 0.04 lbs

APPROVED

DESIGN	HS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	AJS	DRAWING NO.	REV. D
MFG. APPR.	JLM	D4000	SHEET 5 OF 8
APPROVED	MP	TITLE	SCALE
DE APPR.	DS	FITTING	NTS
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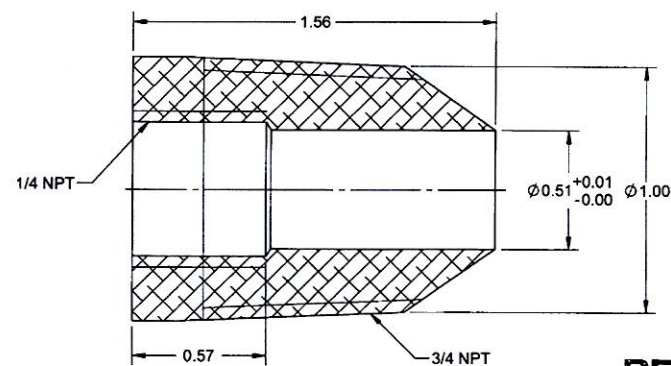
DART AEROSPACE PART NUMBER	JOHN CAMERON AVIATION PART NUMBER
D4000-7	REF JCA-M47-1-10



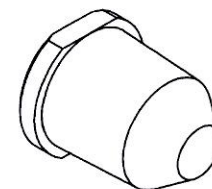
D4000-7 FUEL PICK UP FITTING

NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) ROUND BAR
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR
PER AMS-QQ-A-200/8 (OR AMS 4160)
REF DART SPEC M6061T6R
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.10 lbs



SECTION F-F



RELEASED

2015 JAN 15 *up*

APPROVED

DESIGN	HS
DRAWN	AP
CHECKED	AJS
MFG. APPR.	JLM
APPROVED	MP
DE APPR.	DS
DATE	14.11.14

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO.	REV. D
D4000	SHEET 6 OF 8
TITLE	SCALE
FITTING	NTS

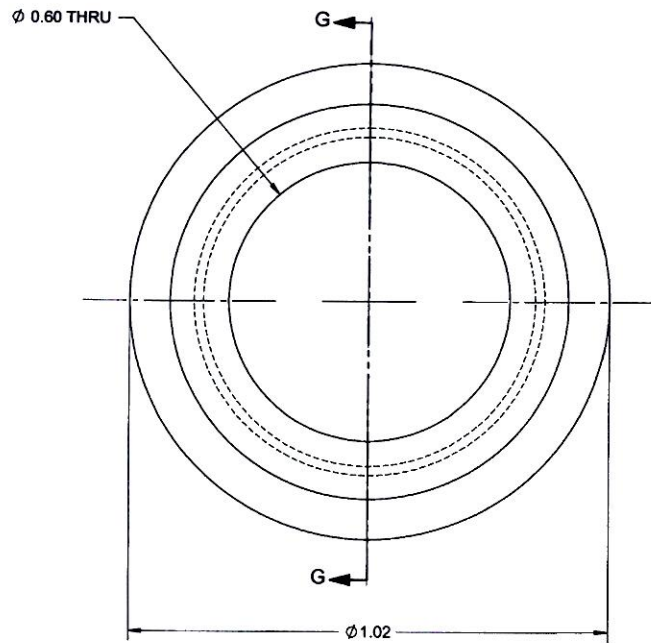
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DART AEROSPACE
PART NUMBER

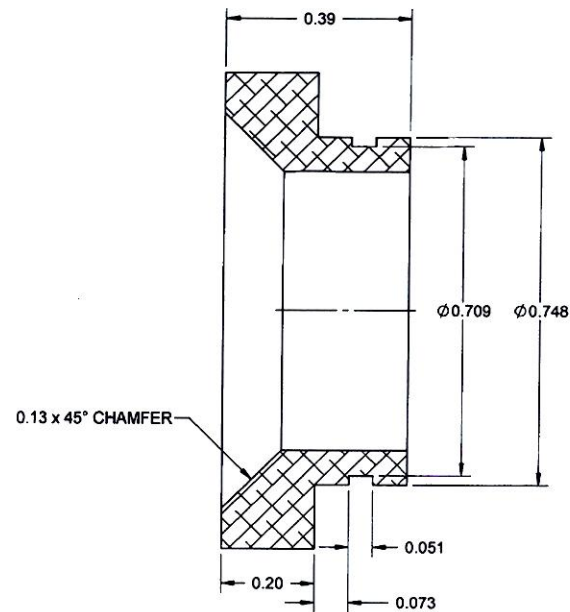
D4000-9

JOHN CAMERON AVIATION
PART NUMBER

JCA-M47-1-11



D4000-9 GROMMET



SECTION G-G



RELEASED

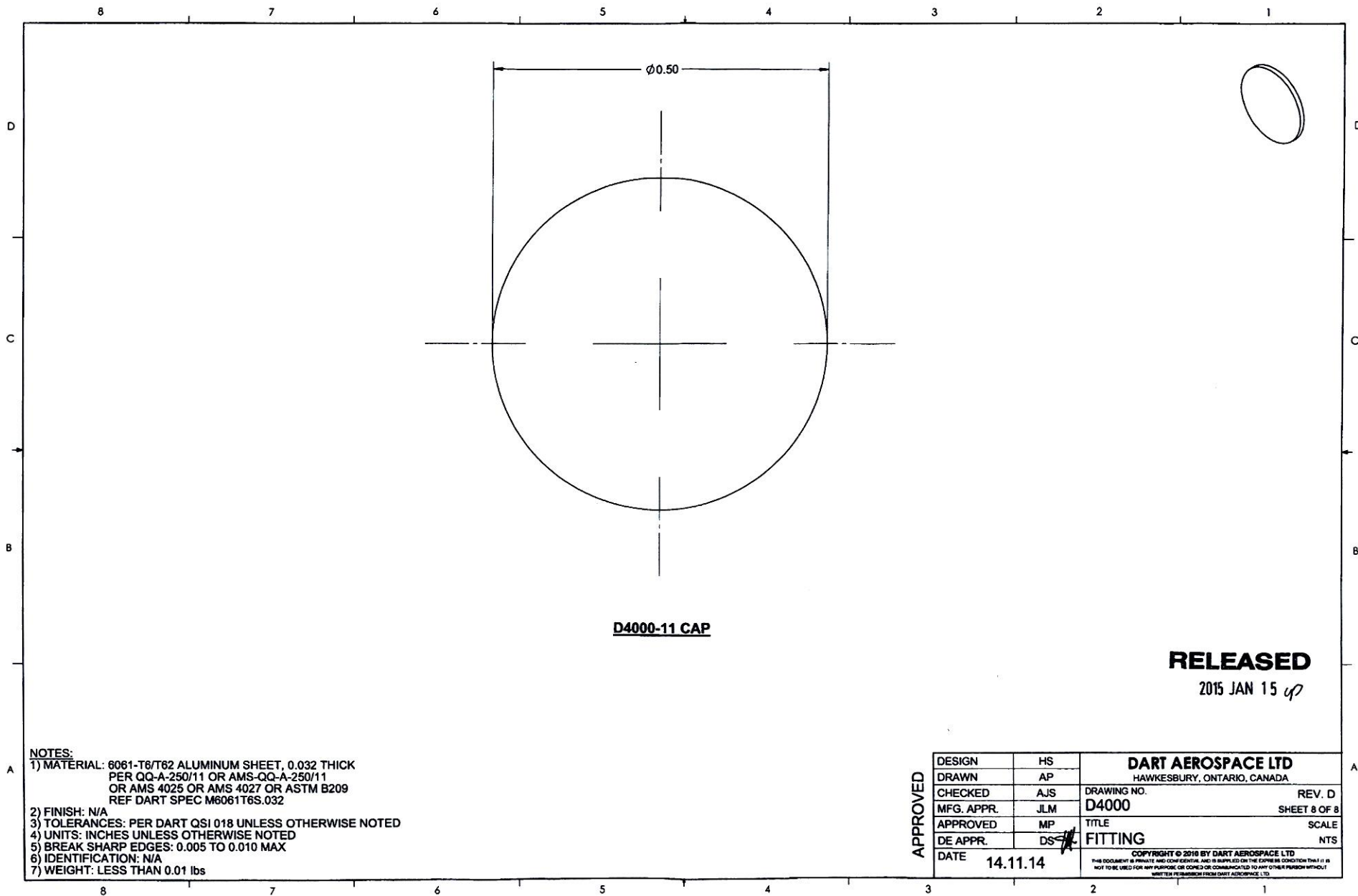
2015 JAN 15

NOTES:

- 1) MATERIAL: DELRIN II 150E OR ACETRON GP ACETAL, Ø1.000 ROUND BAR
REF DART SPEC M-DELRIN-R1.000
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 METHOD 6.7
- 7) WEIGHT: LESS THAN 0.01 lbs

APPROVED

DESIGN	HS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	AJS	DRAWING NO.	REV. D
MFG. APPR.	JLM	D4000	SHEET 7 OF 8
APPROVED	MP	TITLE	SCALE
DE APPR.	DS	FITTING	NTS
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RELEASED
2015 JAN 15 *up*

NOTES:

- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.032 THICK
PER QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027 OR ASTM B209
REF DART SPEC M6061T6S.032
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: LESS THAN 0.01 lbs

APPROVED

DESIGN	HS	DART AEROSPACE LTD	
DRAWN	AP	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AJS	DRAWING NO.	REV. D
MFG. APPR.	JLM	D4000	SHEET 8 OF 8
APPROVED	MP	TITLE	SCALE
DE APPR.	DS	FITTING	NTS
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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

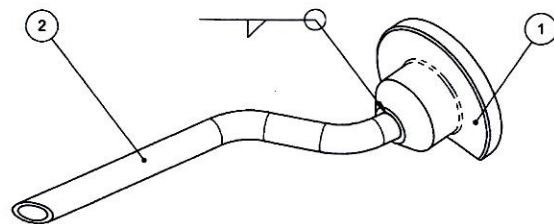


QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

ITEM	QTY -041	P/N	DESCRIPTION	JOHN CAMERON AVIATION PART NUMBER
	X	D4000-041	DRAIN FITTING ASSEMBLY, AFT	JCA-M47-1-06
1	1	D4000-3	FUEL SUMP DRAIN FITTING	
2	1	D4003-1	INTERNAL DRAIN LINE, AFT	

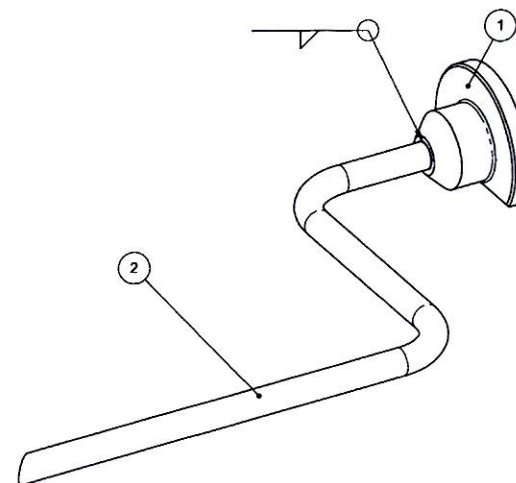


D4000-041 DRAIN FITTING ASSEMBLY, AFT

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 METHOD 6.6
- 7) WEIGHT: D4000-041 - 0.04 lbs
D4000-043 - 0.05 lbs
- 8) WELD PER QSI 004

ITEM	QTY -043	P/N	DESCRIPTION	JOHN CAMERON AVIATION PART NUMBER
	X	D4000-043	DRAIN FITTING ASSEMBLY, FWD	JCA-M47-1-15
1	1	D4000-3	FUEL SUMP DRAIN FITTING	
2	1	D4003-3	INTERNAL DRAIN LINE, FWD	



D4000-043 DRAIN FITTING ASSEMBLY, FWD

RELEASED

2015 JAN 15

ECN 14-666

D	COMPLETE REDESIGN OF D4000-1, SEE REV. C FOR DETAILS	AP	14.11.14
C	REMOVED COUNTERSINK FROM D4000-1 (ZNC5-3) ADD CHEMICAL CONVERSION COAT TO NOTE 2, SHEET 3	ML	14.06.27
B	RE-DESIGN D4000-1 TO BE RIVETED (ZNC5-3) UPDATED BOM FORMAT ON SHEET 1 AND 2, UPDATE NOTE 6	ML	14.05.30
A	NEW ISSUE	HS	10.02.10
REV.	DESCRIPTION	BY	DATE
DESIGN	HS		
DRAWN	AP		
CHECKED	AJS		
MFG. APPR.	JLM		
APPROVED	MP		
DE APPR.	DS		
DATE	14.11.14		

APPROVED

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO.

D4000

TITLE

FITTING

SCALE

NTS

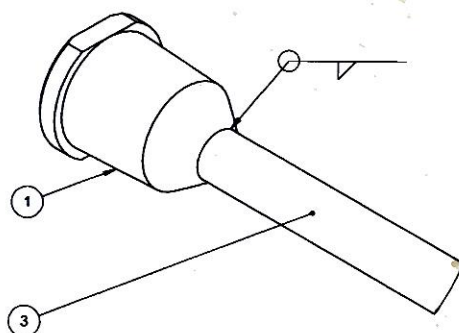
REV. D

SHEET 1 OF 8

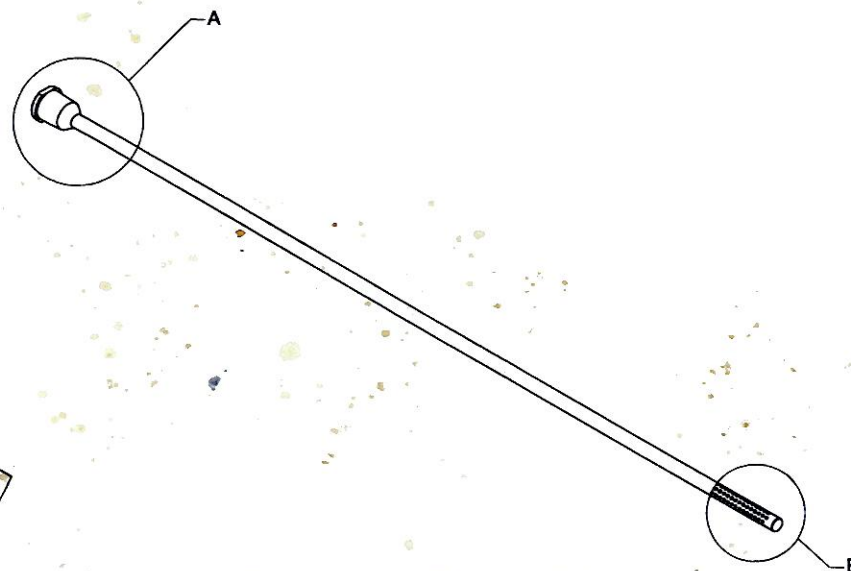
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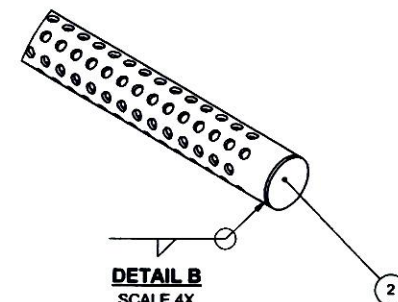
ITEM	QTY -045	P/N	DESCRIPTION	JOHN CAMERON AVIATION PART NUMBER
	X	D4000-045	FUEL PICK UP FITTING ASSEMBLY	JCA-M47-1-10
1	1	D4000-7	FUEL PICK UP FITTING	
2	1	D4000-11	CAP	
3	1	D4003-5	FUEL PICK UP LINE	



DETAIL A
SCALE 4X



D4000-045 FUEL PICKUP FITTING ASSEMBLY



DETAIL B
SCALE 4X

RELEASED

2015 JAN 15 *ap*

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 METHOD 6.6
- 7) WEIGHT: 0.27 lbs
- 8) WELD PER QSI 004

APPROVED

DESIGN	HS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	AJS	DRAWING NO.	REV. D
MFG. APPR.	JLM	D4000	SHEET 2 OF 8
APPROVED	MP	TITLE	SCALE
DE APPR.	DS	FITTING	NTS
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